



Mr. José Domingos Miguez  
Chair, CDM Executive Board  
UNFCCC Secretariat  
CDMinfo@unfccc.int

July 4<sup>th</sup> 2006

Re Request for review of the request for registration for the CDM project activity "Ganpati co-generation project at Medak, Andhra Pradesh" (Ref. no. 0370)

Dear Mr. Miguez,

SGS has been informed that the request for registration for the CDM project activity "Ganpati co-generation project at Medak, Andhra Pradesh" (Ref. no. 0370) is under consideration for review.

Through this letter we would like to comment on the reasons for review and provide additional information. The requests for review are based on the same reasons below and read:

**Request 1, 2 & 3.**

**Comment 1:**

*"Based on information and discussions presented in various section of the PDD, the reduction in GHG emissions does not appear additional to any that would occur in the absence of the proposed activity. The PDD clearly indicates that the bagasse used in the project requesting for CDM registration could have been used for ethanol production. Since ethanol is a GHG free commodity, diverting the use of bagasse from ethanol plant to co-generation plant offsetting grid electricity does not result in GHG mitigation."*

**SGS Reply to comment 1:**

It is molasses not bagasse which is used for manufacturing of Ethanol. Normally, sugar industries produce sugar as the main product and the bagasse, press mud and molasses are the by-products. The bagasse is normally burnt in the boiler to produce steam for power generation and process heating. The extra bagasse in India are either dumped at land fill sites or burnt in uncontrolled manner. The press mud is used as manure in the fields and molasses is send to the distillery for making alcohols.

The project proponent had options to go for a project using bagasse for power generation efficiently with the help of high pressure boiler-turbine configuration or a project using molasses for ethanol production or continue with BAU scenario.

The project proponent decided to go for this project and to overcome the “technology barrier”, “prevailing practice barrier” and “investment barrier” of the project through the CDM benefit. The BAU scenario was not going to face any barriers and was the most likely baseline scenario.

Hence, the project activity is additional to any that would have happened at the site and mitigate GHG emission which otherwise would have been generated by the grid connected power plants which mainly operates on fossil fuel based power plants.

**Comment 2:**

*While calculating the approximate operating margin none of the options specified by AMS I.D. has been followed. The project participant could have used option 1 (a 3 year average, based on the most recent statistics available at the time of PDD submission), as necessary data are easily available from the CEA of India. The PDD uses Option 2 (the year in which project generation occurs, if emission factor is updated based on ex post monitoring), but neither the PDD nor the validation report mentions anywhere that the emission factor would be updated based on ex-post monitoring.*

**SGS Reply to comment 2:**

The PDD used AMS I. D version 07:28 November 2005 and as per the methodology, the baseline is the kWh produced by the renewable generating unit multiplied by an emission coefficient (measured in kg CO<sub>2</sub>equ/kWh) calculated in a transparent and conservative manner (PDD page 18 and Annex 3) as:

The average of the “approximate operating margin” and the “build margin”, where:

- (i) The “approximate operating margin” is the weighted average emissions (in kg CO<sub>2</sub>equ/kWh) of all generating sources serving the system, excluding hydro, geothermal, wind, low-cost biomass, nuclear and solar generation;
- (ii) The “build margin” is the weighted average emissions (in kg CO<sub>2</sub>equ/kWh) of recent capacity additions to the system, which capacity additions are defined as the greater (in MWh) of most recent 20% of existing plants or the 5 most recent plants.

According to methodology, the PDD used the correct version because the project was submitted with request for registration on 26<sup>th</sup> April 2006 before the deadline of using version 07. Moreover, this version was more conservative. The copy of e-mail dated 26 April 2006 from EB is attached as Annex 01.

**Comment 3:**

*The validation report does not include a validation statement (or opinion). Normally the DOE provides three pieces of document (a protocol, a finding and an assessment) separately and in this case the main piece stating its opinion or statement (or a conclusion of the validation process) is missing.*

**SGS Reply to comment 3:**

The registration form includes “**Final Comments and validation opinion**”. The validation protocol, findings and assessment is also on the website <http://cdm.unfccc.int/Projects/DB/SGS-UJKL1146080365.67/view.html>

**Comment 4:**

*The PDD states that the net thermal energy output from the boiler is less than 45 MWth. Please specify what is the actual thermal energy output capacity of the boiler. Also, how much of the total electricity generation from the project is used for captive use and auxiliary consumption? Since the project is already in operation for a couple of years, these numbers are easily available through monitoring records.*

**SGS Reply to comment 4:**

The actual generation data has been received from the project developer and attached as Annex 02. The unit of the data is kWh. The letters from the boiler supplier with thermal output calculation are also enclosed as Annex 03, stating that the boiler was designed to operate at 45MWth of energy output. The actual steam generation is maximum 42 TPH from November 2004 to April 2005 while the maximum limit is 55 TPH for 45MWth output of the boiler.

**Comment 5:**

*One of the alternatives to the project activity mentioned in the PDD is “set up a new co-generation power project based on high pressure boiler configuration and develop the project under the CDM” which is the proposed CDM project, not an alternative to the project. It should be corrected to: “set up a new co-generation power project based on high pressure boiler configuration and develop the project without CDM registration”*

**SGS Reply to comment 5:**

This was a typographical error and corrected in revised PDD (Annex 04).

**Comment 6:**

*Under the monitoring plan, the table listing items to be monitored (e.g., power generation, captive power consumption, export etc), uses unit MW. It should be MWh instead of MW.*

**SGS Reply to comment 6:**

This was a typographical error and corrected in revised PDD (Annex 04)

We apologize if the initial validation report has been unclear and hope that this information addresses the concerns of the members of the Board.

Sanjeev Kumar (+91 124 2399990 – 98) will be the contact person for the review process and is available to address questions from the Board during the consideration of the review in case the Executive Board wishes.

Yours sincerely

Robert Dornau  
Director, Climate Change Program  
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M: +41 79 689 22 42

Marco van der Linden  
CDM Product Coordinator  
[Marco.vanderLinden@sgs.com](mailto:Marco.vanderLinden@sgs.com)  
T: +49 181 693293  
M: + 49 651 345590



Annexes:

Annex 01: Copy of e-mail from CDM executive board

Annex 02: Actual plant generation data

Annex 03: Letters from the boiler supplier with heat output calculation

Annex 04: Revised PDD

**Khursheed Zaidi, Syed (Gurgaon)**

**From:** Lubrecht, Irma (Spijkenisse)  
**Sent:** Thursday, April 27, 2006 1:37 AM  
**To:** Kumar, Sanjeev (Gurgaon)  
**Cc:** Shetty, Shivananda (Gurgaon); Khursheed Zaidi, Syed (Gurgaon)  
**Subject:** FW: 00000370 - Submission confirmation

-----Original Message-----

**From:** CDM Project Registration [mailto:cdmregistration@unfccc.int]  
**Sent:** woensdag 26 april 2006 21:39  
**To:** van der Linden, Marco (Spijkenisse); Quessada, Gaelle (Camberley); Lubrecht, Irma (Spijkenisse)  
**Subject:** 00000370 - Submission confirmation

**Concerns:** Proposed CDM project: "Ganpati co-generation project at Medak, Andhra Pradesh" -  
**Ref No.** 00000370

Dear DOE representative,

Please note and convey to the project participants that documentation for a request for registration of the proposed project activity "Ganpati co-generation project at Medak, Andhra Pradesh" has been received from your DOE.

In accordance with the relevant procedure of the Executive Board, project participants have to transfer the non-reimbursable registration fee and upload through you a proof of payment in order to make the request submission complete.

You, as DOE, will have to communicate to the project participants this communication and subsequently receive, and submit to UNFCCC through the registration interface, the proof of payment that clearly indicates the reference number identified below. We would like to note that it is not important who undertakes the payment of the fee to UNFCCC but that the transfer order has to be clearly identified with this reference number in order to trace receipt on UNFCCC side. Once the proof of payment and the fee have been received by UNFCCC, the completeness check will be undertaken in accordance with the relevant procedure.

Hence, project participants are herewith kindly requested to ensure the transfer the non-reimbursable registration fee:

**Project activity title:** "Ganpati co-generation project at Medak, Andhra Pradesh"  
**Non-reimbursable registration fee:** USD 8210.4 **Transfer reference:** UNFCCC00000370CDMP

In accordance with the information provided and the procedure for registration of project activities, may we kindly ask you to take appropriate steps, in accordance with your arrangements with project participants, to facilitate the payment of the above fee to UNFCCC for the above proposed CDM project activity and that the proof of payment is uploaded into the UNFCCC CDM project registration system.

Yours sincerely,  
CDM Team  
UNFCCC

**GANPATI SUGAR INDUSTRIES LIMITED**

**15 MW COGENERATION PLANT**

**GENERATION/EXPORT/AUX.CONSUMS/CAPTIVE CONSUMPTION IN THE FINANCIAL YEAR 2004-2005(CALANDER MONTH)**

SL.NO	MONTH	GENERATION IN UNITS		AUXILIARY CONSUMPTION		CAPTIVE CONSUMPTION		EXPORT	
		SEASON	OFF-SEASON	SEASON	OFF-SEASON	SEASON	OFF-SEASON	SEASON	OFF-SEASON
1	Apr-04	-	2,165,000	-	285,700	-	19,300	-	1,860,000
2	May-04	-	2,536,000	-	302,200	-	30,800	-	2,203,000
3	Jun-04	-	-	-	-	-	-	-	-
4	Jul-04	-	-	-	-	-	-	-	-
5	Aug-04	-	-	-	-	-	-	-	-
6	Sep-04	-	-	-	-	-	-	-	-
7	Oct-04	-	-	-	-	-	-	-	-
8	Nov-04	3,020,000	-	459,000	-	762,000	-	1,799,000	-
9	Dec-04	4,414,000	-	542,000	-	966,000	-	2,906,000	-
10	Jan-05	6,162,000	-	831,000	-	1,388,000	-	3,943,000	-
11	Feb-05	2,683,000	2,663,000	363,800	393,200	592,000	518,000	1,714,000	1,765,000
12	Mar-05	-	2,758,000	-	334,000	-	564,000	-	1,860,000
	<b>TOTAL</b>	<b>16,279,000</b>	<b>10,122,000</b>	<b>2,195,800</b>	<b>1,315,100</b>	<b>3,708,000</b>	<b>1,132,100</b>	<b>10,362,000</b>	<b>7,688,000</b>

\* 1 unit = 1 Kwh

**GANPATI SUGAR INDUSTRIES LIMITED**

**15 MW COGENERATION PLANT**

**GENERATION/EXPORT/AUX.CONSUMS/CAPTIVE CONSUMPTION IN THE FINANCIAL YEAR 2005-2006 (CALANDER MONTH)**

SL.NO	MONTH	GENERATION IN UNITS		AUXILIARY CONSUMPTION		CAPTIVE CONSUMPTION		EXPORT	
		SEASON	OFF-SEASON	SEASON	OFF-SEASON	SEASON	OFF-SEASON	SEASON	OFF-SEASON
1	Apr-05	-	4,380,000	-	681,000	-	598,000	-	3,101,000
2	May-05	-	-	-	-	-	-	-	-
3	Jun-05	-	-	-	-	-	-	-	-
4	Jul-05	-	-	-	-	-	-	-	-
5	Aug-05	-	-	-	-	-	-	-	-
6	Sep-05	-	-	-	-	-	-	-	-
7	Oct-05	-	-	-	-	-	-	-	-
8	Nov-05	-	-	-	-	-	-	-	-
9	Dec-05	6,914,000	-	745,150	-	1,040,850	-	5,128,000	-
10	Jan-06	8,756,000	-	972,000	-	1,346,000	-	6,438,000	-
11	Feb-06	6,494,000	-	850,000	-	1,244,000	-	4,400,000	-
12	Mar-06	6,538,000	-	934,900	-	1,358,100	-	4,245,000	-
	<b>TOTAL</b>	<b>28,702,000</b>	<b>4,380,000</b>	<b>3,502,050</b>	<b>681,000</b>	<b>4,988,950</b>	<b>598,000</b>	<b>20,211,000</b>	<b>3,101,000</b>

\* 1 unit = 1 Kwh

**GANPATI SUGAR INDUSTRIES LIMITED**

**15 MW COGENERATION PLANT**

**GENERATION/EXPORT/AUX.CONS/CAPTIVE CONSUMPTION IN THE FINANCIAL YEAR 2006-2007 (CALANDER MONTH)**

SL.NO	MONTH	GENERATION IN UNITS		AUXILIARY CONSUMPTION		CAPTIVE CONSUMPTION		EXPORT	
		SEASON	OFF-SEASON	SEASON	OFF-SEASON	SEASON	OFF-SEASON	SEASON	OFF-SEASON
1	<b>Apr-06</b>	5,252,000	744,000	775,000	120,000	1,026,000	112,000	3,451,000	512,000
2	<b>May-06</b>	-	6,658,000	-	907,000	-	450,000	-	5,301,000
3	<b>Jun-06</b>	-	4,398,000	-	577,000	-	42,000	-	3,779,000
	<b>TOTAL</b>	<b>5,252,000</b>	<b>11,800,000</b>	<b>775,000</b>	<b>1,604,000</b>	<b>1,026,000</b>	<b>604,000</b>	<b>3,451,000</b>	<b>9,592,000</b>

\* 1 unit = 1 Kwh



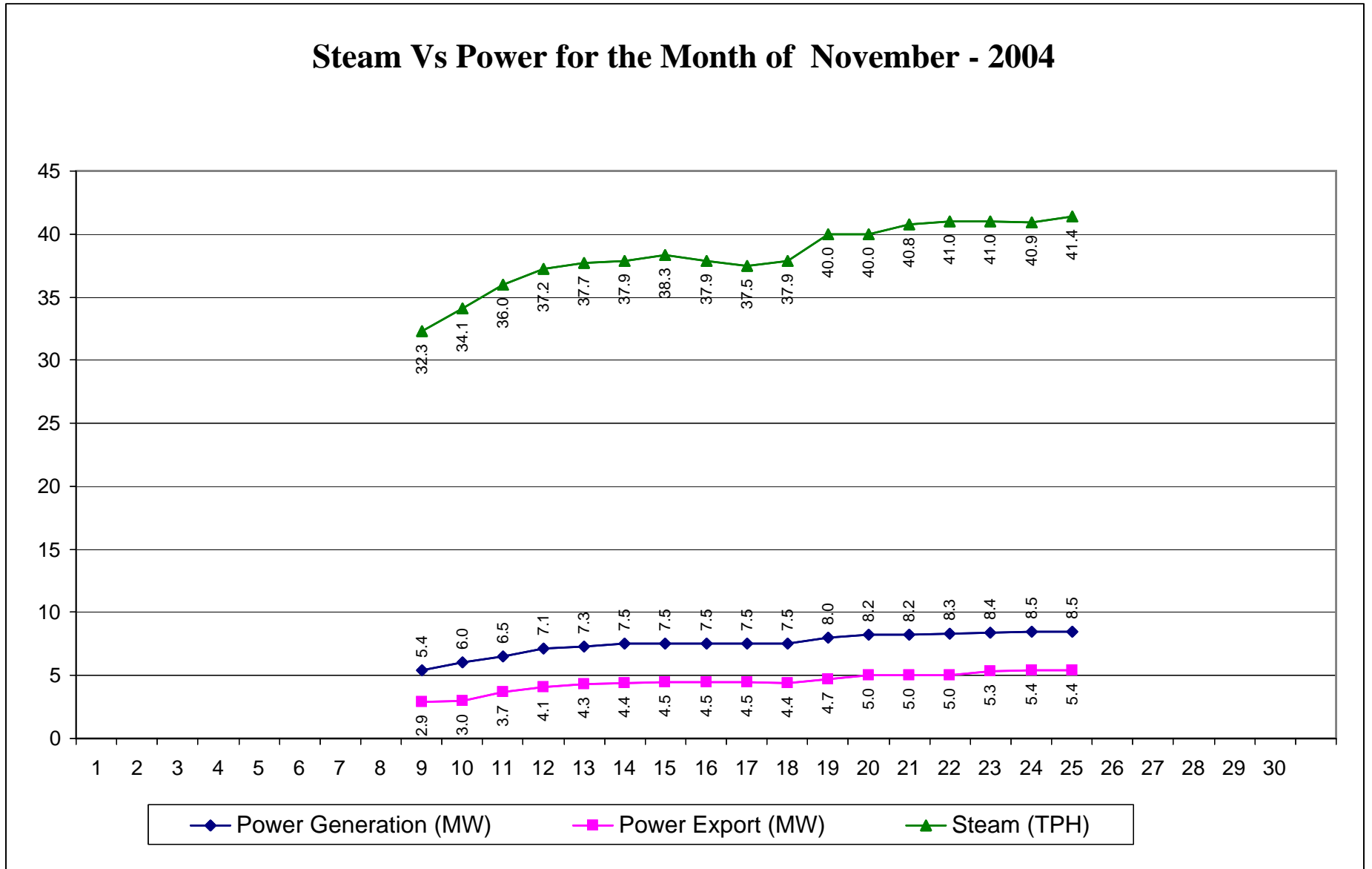
November - 2004

<b>Steam Flow (TPH)</b>	<b>Power Gen. (MW)</b>	<b>Power Export (MW)</b>	<b>Date</b>
			1
			2
			3
			4
			5
			6
			7
			8
32.3	5.4	2.9	9
34.1	6.0	3.0	10
36.0	6.5	3.7	11
37.2	7.1	4.1	12
37.7	7.3	4.3	13
37.9	7.5	4.4	14
38.3	7.5	4.5	15
37.9	7.5	4.5	16
37.5	7.5	4.5	17
37.9	7.5	4.4	18
40.0	8.0	4.7	19
40.0	8.2	5.0	20
40.8	8.2	5.0	21
41.0	8.3	5.0	22
41.0	8.4	5.3	23
40.9	8.5	5.4	24
41.4	8.5	5.4	25
			26
			27
			28
			29
			30

# GANPATI SUGAR INDUSTRIES LIMITED.

15 M.W. CO-GEN PLANT

## Steam Vs Power for the Month of November - 2004



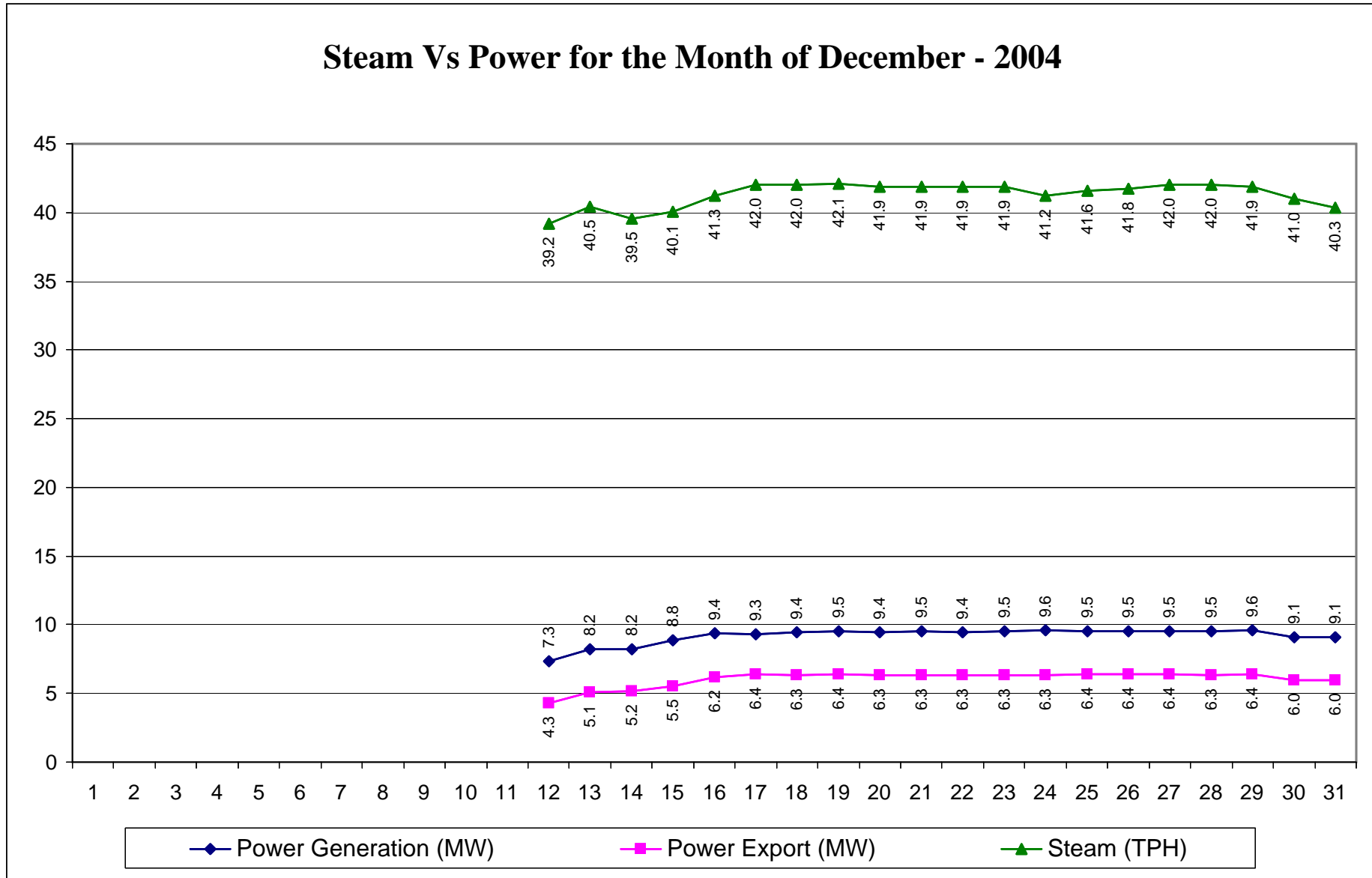
1. STG synchronised on 09.11.04 at 3.25 P.M and stopped on 26.11.04 at 6.00 A.M

**December - 2004**

<b>Steam Flow (TPH)</b>	<b>Power Gen. (MW)</b>	<b>Power Export (MW)</b>	<b>Date</b>
			1
			2
			3
			4
			5
			6
			7
			8
			9
			10
			11
39.2	7.3	4.3	12
40.5	8.2	5.1	13
39.5	8.2	5.2	14
40.1	8.8	5.5	15
41.3	9.4	6.2	16
42.0	9.3	6.4	17
42.0	9.4	6.3	18
42.1	9.5	6.4	19
41.9	9.4	6.3	20
41.9	9.5	6.3	21
41.9	9.4	6.3	22
41.9	9.5	6.3	23
41.2	9.6	6.3	24
41.6	9.5	6.4	25
41.8	9.5	6.4	26
42.0	9.5	6.4	27
42.0	9.5	6.3	28
41.9	9.6	6.4	29
41.0	9.1	6.0	30
40.3	9.1	6.0	31

GANPATI SUGAR INDUSTRIES LIMITED  
15 M.W. CO-GEN PLANT

**Steam Vs Power for the Month of December - 2004**

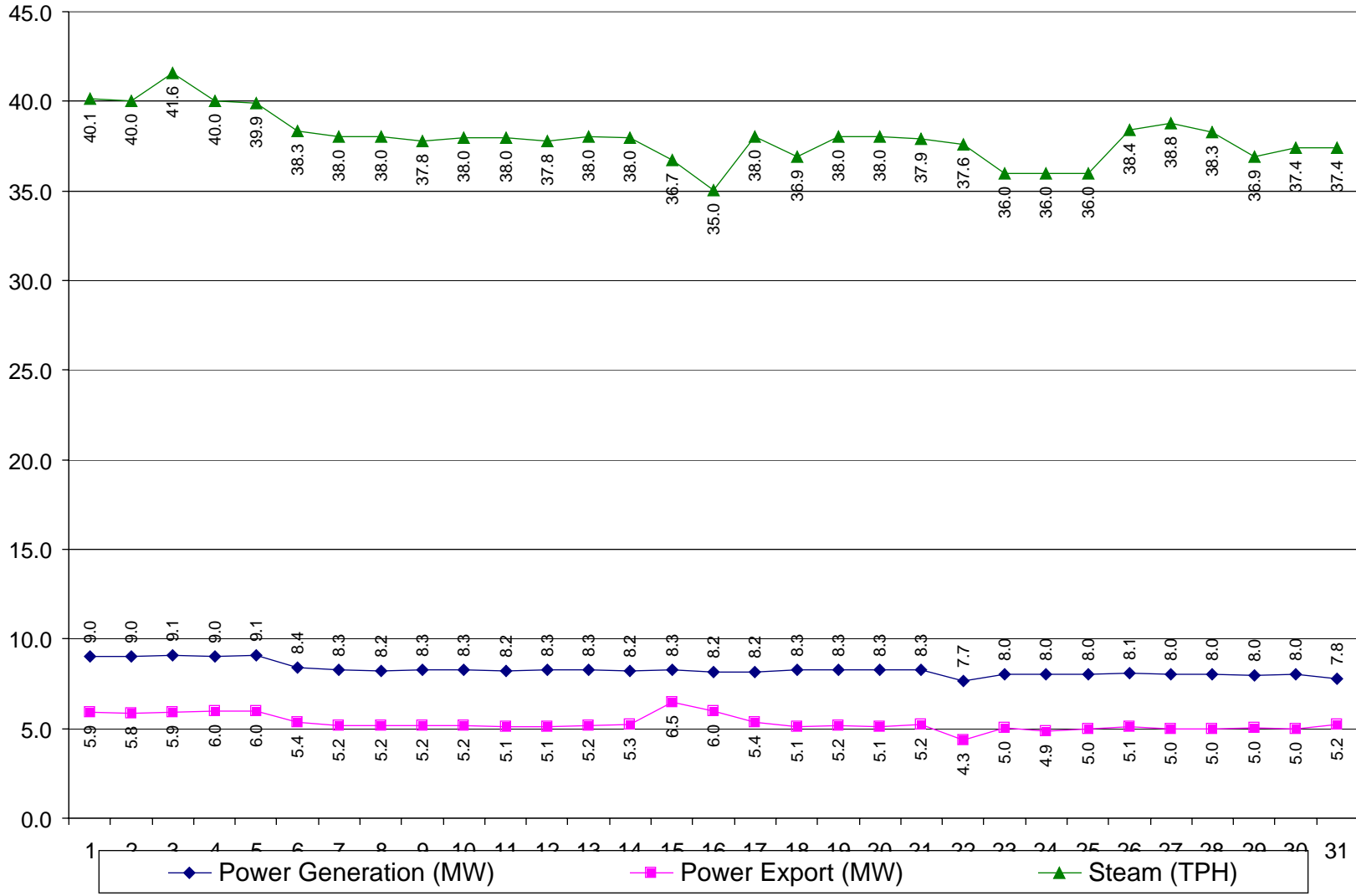


1. STG synchronised on 12.12.04 at 10.50 A.M

<b>January - 2005</b>			
<b>Steam</b>	<b>Power</b>	<b>Power</b>	
<b>Flow</b>	<b>Gen.</b>	<b>Export</b>	<b>Date</b>
(TPH)	(MW)	(MW)	
40.1	9.0	5.9	1
40.0	9.0	5.8	2
41.6	9.1	5.9	3
40.0	9.0	6.0	4
39.9	9.1	6.0	5
38.3	8.4	5.4	6
38.0	8.3	5.2	7
38.0	8.2	5.2	8
37.8	8.3	5.2	9
38.0	8.3	5.2	10
38.0	8.2	5.1	11
37.8	8.3	5.1	12
38.0	8.3	5.2	13
38.0	8.2	5.3	14
36.7	8.3	6.5	15
35.0	8.2	6.0	16
38.0	8.2	5.4	17
36.9	8.3	5.1	18
38.0	8.3	5.2	19
38.0	8.3	5.1	20
37.9	8.3	5.2	21
37.6	7.7	4.3	22
36.0	8.0	5.0	23
36.0	8.0	4.9	24
36.0	8.0	5.0	25
38.4	8.1	5.1	26
38.8	8.0	5.0	27
38.3	8.0	5.0	28
36.9	8.0	5.0	29
37.4	8.0	5.0	30
37.4	7.8	5.2	31

GANPATI SUGAR INDUSTRIES LIMITED.  
15 M.W. CO-GEN PLANT

**Steam Vs Power for the Month of January-2005**

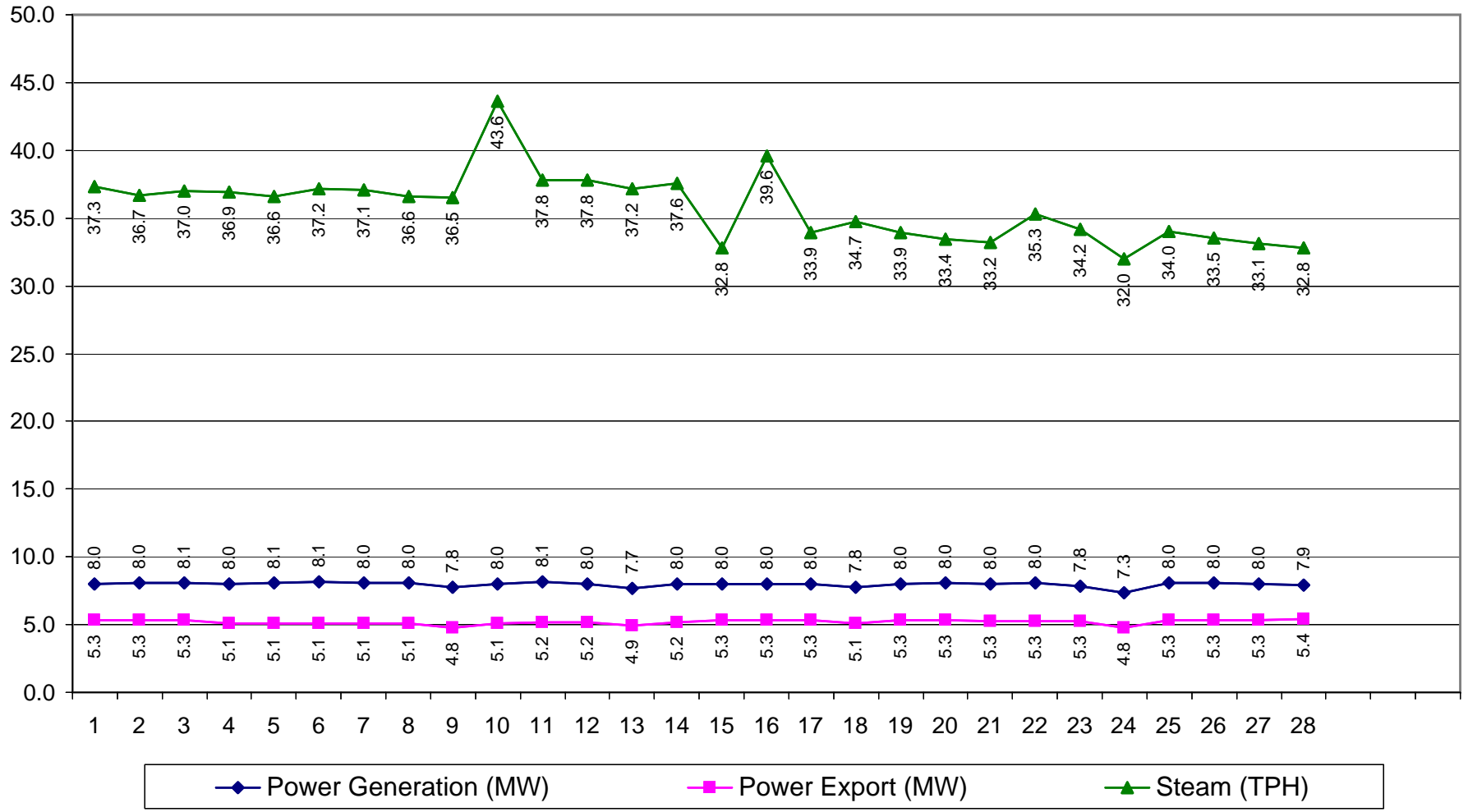


**February - 2005**

<b>Steam Flow (TPH)</b>	<b>Power Gen. (MW)</b>	<b>Power Export (MW)</b>	<b>Date</b>
37.3	8.0	5.3	1
36.7	8.0	5.3	2
37.0	8.1	5.3	3
36.9	8.0	5.1	4
36.6	8.1	5.1	5
37.2	8.1	5.1	6
37.1	8.0	5.1	7
36.6	8.0	5.1	8
36.5	7.8	4.8	9
43.6	8.0	5.1	10
37.8	8.1	5.2	11
37.8	8.0	5.2	12
37.2	7.7	4.9	13
37.6	8.0	5.2	14
32.8	8.0	5.3	15
39.6	8.0	5.3	16
33.9	8.0	5.3	17
34.7	7.8	5.1	18
33.9	8.0	5.3	19
33.4	8.0	5.3	20
33.2	8.0	5.3	21
35.3	8.0	5.3	22
34.2	7.8	5.3	23
32.0	7.3	4.8	24
34.0	8.0	5.3	25
33.5	8.0	5.3	26
33.1	8.0	5.3	27
32.8	7.9	5.4	28

GANPATI SUGAR INDUSTRIES LIMITED  
15 M.W. CO-GEN PLANT

**Steam Vs Power for the Month of February - 2005**



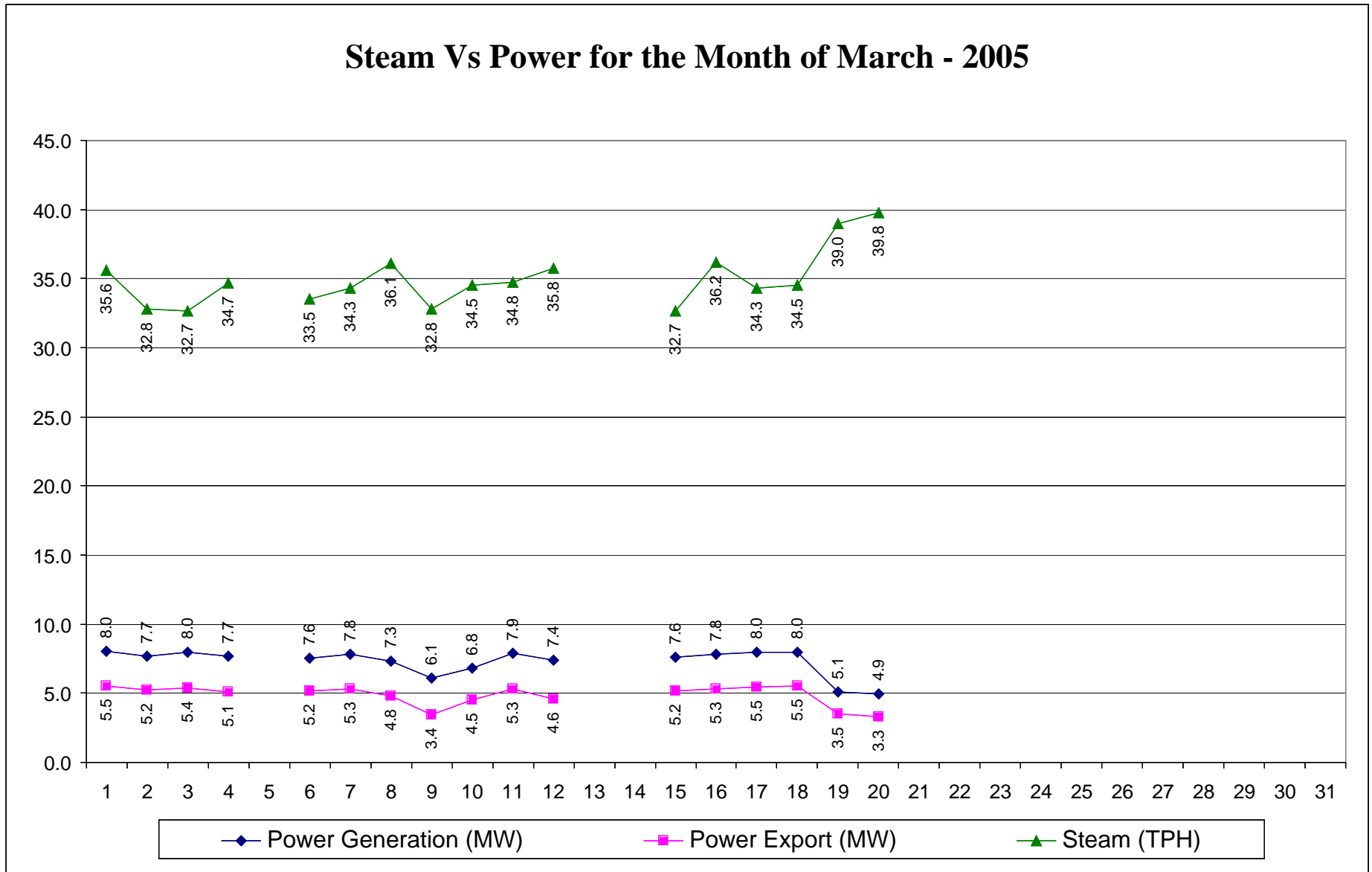


**March - 2005**

<b>Steam Flow (TPH)</b>	<b>Power Gen. (MW)</b>	<b>Power Export (MW)</b>	<b>Date</b>
35.6	8.0	5.5	1
32.8	7.7	5.2	2
32.7	8.0	5.4	3
34.7	7.7	5.1	4
			5
33.5	7.6	5.2	6
34.3	7.8	5.3	7
36.1	7.3	4.8	8
32.8	6.1	3.4	9
34.5	6.8	4.5	10
34.8	7.9	5.3	11
35.8	7.4	4.6	12
			13
			14
32.7	7.6	5.2	15
36.2	7.8	5.3	16
34.3	8.0	5.5	17
34.5	8.0	5.5	18
39.0	5.1	3.5	19
39.8	4.9	3.3	20
			21
			22
			23
			24
			25
			26
			27
			28
			29
			30
			31

GANPATI SUGAR INDUSTRIES LIMITED  
15 M.W. CO-GEN PLANT

**Steam Vs Power for the Month of March - 2005**



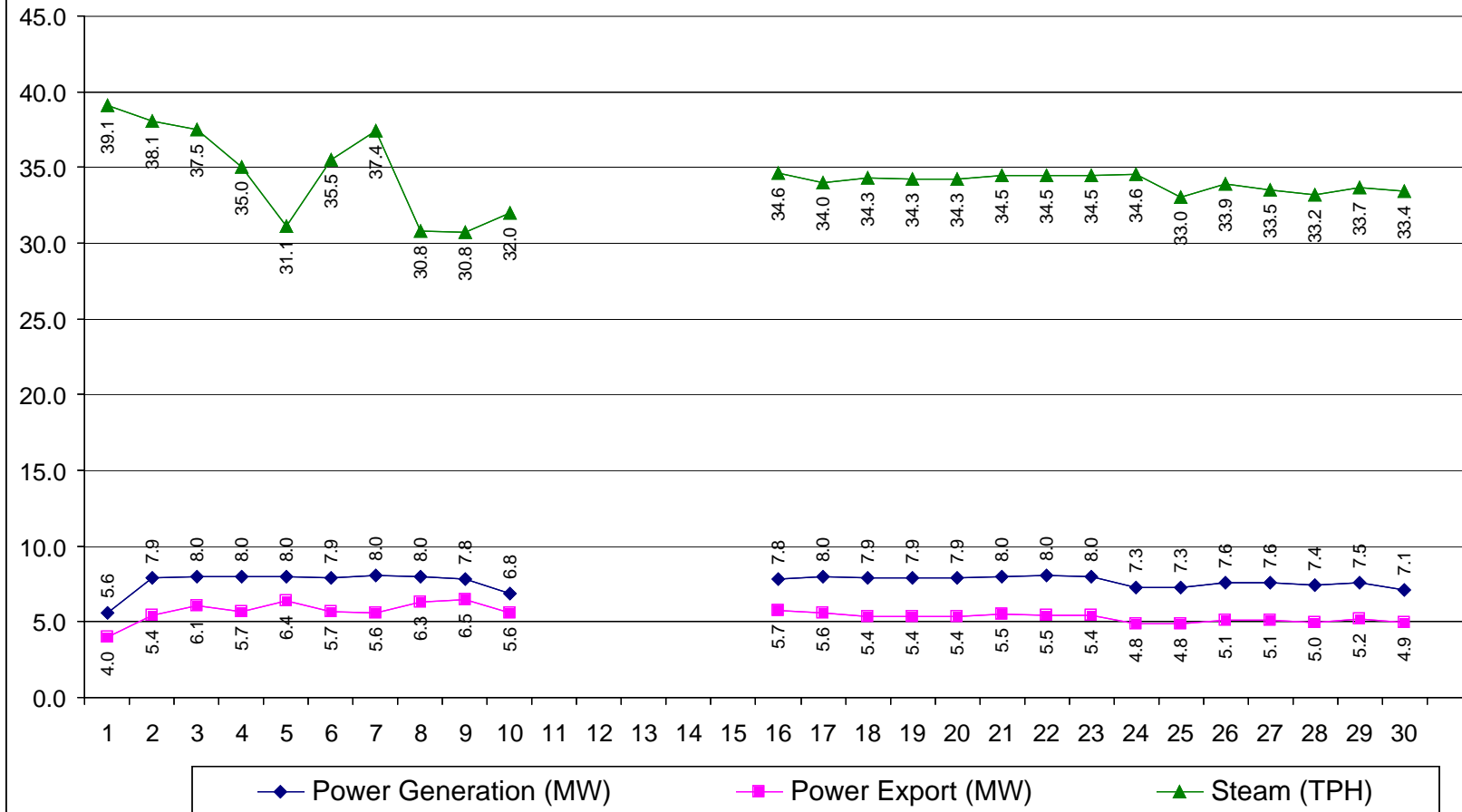
1. STG stopped on 04.03.05 at 10.47 P.M and synchronised on 06.03.05
2. STG stopped on 12.03.05 at 3.45 P.M and synchronised on 15.03.05 at 10.05 A.M

**April - 2005**

<b>Steam Flow (TPH)</b>	<b>Power Export (MW)</b>	<b>Date</b>
39.1	4.0	1
38.1	5.4	2
37.5	6.1	3
35.0	5.7	4
31.1	6.4	5
35.5	5.7	6
37.4	5.6	7
30.8	6.3	8
30.8	6.5	9
32.0	5.6	10
		11
		12
		13
		14
		15
34.6	5.7	16
34.0	5.6	17
34.3	5.4	18
34.3	5.4	19
34.3	5.4	20
34.5	5.5	21
34.5	5.5	22
34.5	5.4	23
34.6	4.8	24
33.0	4.8	25
33.9	5.1	26
33.5	5.1	27
33.2	5.0	28
33.7	5.2	29
33.4	4.9	30

GANPATI SUGAR INDUSTRIES LIMITED.  
15 M.W. CO-GEN PLANT

**Steam Vs Power for the Month of April - 2005**



1. STG stopped on 10.04.05 and synchronised on 16.04.05 at 11.15 A.M
2. STG stopped on 30.04.05 at 9.30 P.M

# Thermax Babcock & Wilcox Limited

P. B. No. 33, Chinchwad, Pune-411 019, India.  
Tel. : (91-212) 775941 (10 lines), 770436 (6 lines), 776091/92  
Cable : THERMAX. Fax : (91-212) 774218, 775703  
E-Mail : tbw.mfg@gnpun.globalnet.ems.vsnl.net.in



January 18, 2000



TO WHOMSOEVER IT MAY CONCERN

This is to certify that the boiler No.PB 0421 (TBW Job No.) being supplied by M/s Thermax Babcock & Wilcox Ltd., to M/s Ganpati Sugar Industries Ltd., Fasalwadi / Kulubgoor Village, Sangareddy Mandal, Medak Dist., A.P., is designed, supplied and erected to be operated at a capacity of 45 MW Thermal at a pressure of 67 ata and temperature of 485 +/- 5 deg. C.

For THERMAX BABCOCK & WILCOX LTD.

*NS Bijalany*

AUTHORIZED SIGNATORY

CALCULATION

**BOILER CAPACITY:**

- a) Boiler capacity --- 55000 Kgs/Hr.
- b) Superheated steam enthalpy at 67 ata and 467 ° C --- 808.39 K.Cal/Kg.
- c) Feed water enthalpy at 105 ° C --- 106.49 K.Cal/Kg.
- d) Q duty for boiler ---  $\frac{55000 \times (808.39 - 106.49)}{1000}$   
---  $\frac{55000 \times 701.90}{1000}$   
= 38604.5 MKal/Hr.
- e) Boiler thermal power ---  $\frac{38604.5}{860}$  = 44.89 M Watts

.....



"Certified to be True Copy"

February 6, 2006



TO WHOM SO EVER IT MAY CONCERN

This to certify that the Boiler number PB 0421 (TBW Job No) supplied by M/s Thermax Babcock & Wilcox Ltd., to M/s Ganapati Sugar Industries Limited., Fasalwadi /Kulubgoor village, Sangareddy mandal, Medak district., A.P., had been designed to generate 75 TPH of steam. This was done keeping in view the projected crushing capacity expansion planned by the Company. However, the boiler was de-rated during installation / commissioning to generate 55 TPH of steam.

For THERMAX BABCOCK & WILCOX LTD

A handwritten signature in black ink, appearing to read 'A. Anole'.

AUTHORISED SIGNATORY

